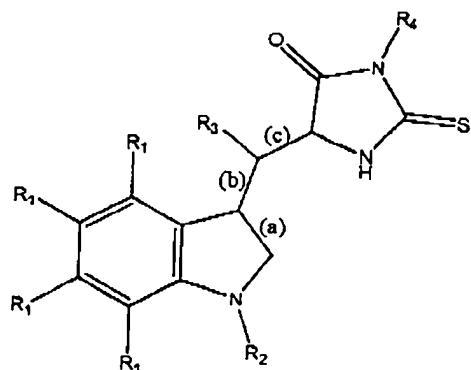


9. (Currently amended) A method for decreasing necrosis in a subject with a disease or condition selected from the group consisting of, Alzheimer's disease, Huntington's disease, cerebral ischemia, stroke, amyotrophic lateral sclerosis, multiple sclerosis, Lewy body disease, Menke's disease, Wilson disease, Creutzfeldt-Jakob disease, and Fahr disease, said method comprising treating a cell with a chemical compound, said compound of the formula:



wherein

each R₁ is independently selected from the group consisting of hydrogen, methyl, carboxy, hydroxyl, methoxyl, amino, and nitro;

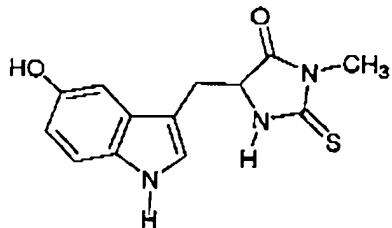
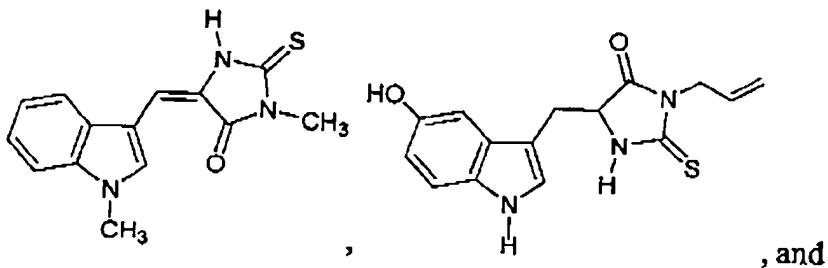
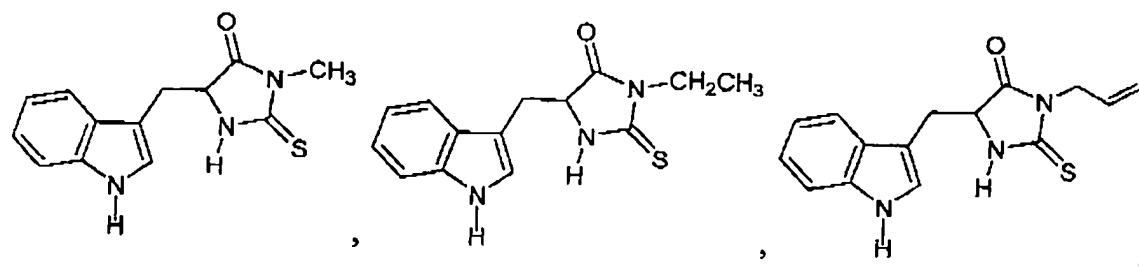
R₂ is selected from the group consisting of hydrogen, alkyl, and acyl;

R₃ is selected from the group consisting of alkyl, acyl, halogen, hydrogen, and hydroxyl;

R₄ is selected from the group consisting of methyl, hydroxyl, carboxyl, and linear and branching alkyl groups; and

each of the bonds (a), (b), and (c) independently is either a double or single bond, provided, however, that bond (a) and bond (b) are not both double bonds.

10. (Previously amended) The method of claim 9, wherein said compound is selected from the group consisting of:



Claims 11-16. (Withdrawn).

17. (Previously amended) The method of claim 9, wherein said cell is capable of undergoing necrosis in the presence of zVAD-fmk and TNF.

18. (Previously amended) The method of claim 9, wherein said cell is capable of undergoing necrosis in the presence of zVAD-fmk and DMSO.

19. (Original) The method of claim 9, wherein said cell is mammalian.

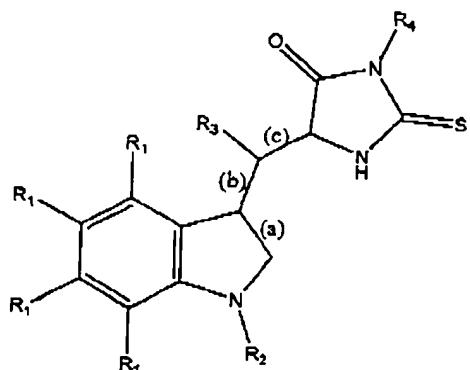
20. (Original) The method of claim 9, wherein said cell is human.

21. (Original) The method of claim 9, wherein said cell is a neuron.

22. (Original) The method of claim 9, wherein said cell is a rodent cell.

23. (Previously amended) The method of claim 9, wherein said compound is in a pharmaceutically acceptable carrier.

24. (Currently amended) A method for treating a condition in a patient subject with a condition selected from the group consisting of: Alzheimer's disease, Huntington's disease, cerebral ischemia, stroke, amyotrophic lateral sclerosis, multiple sclerosis, Lewy body disease, Menke's disease, Wilson disease, Creutzfeldt-Jakob disease, and Fahr disease, wherein decreasing necrosis is of benefit, said method comprising the steps of administering to said subject a chemical compound having the formula:



wherein

each R₁ is independently selected from the group consisting of hydrogen, methyl, carboxy, hydroxyl, methoxyl, amino, and nitro;

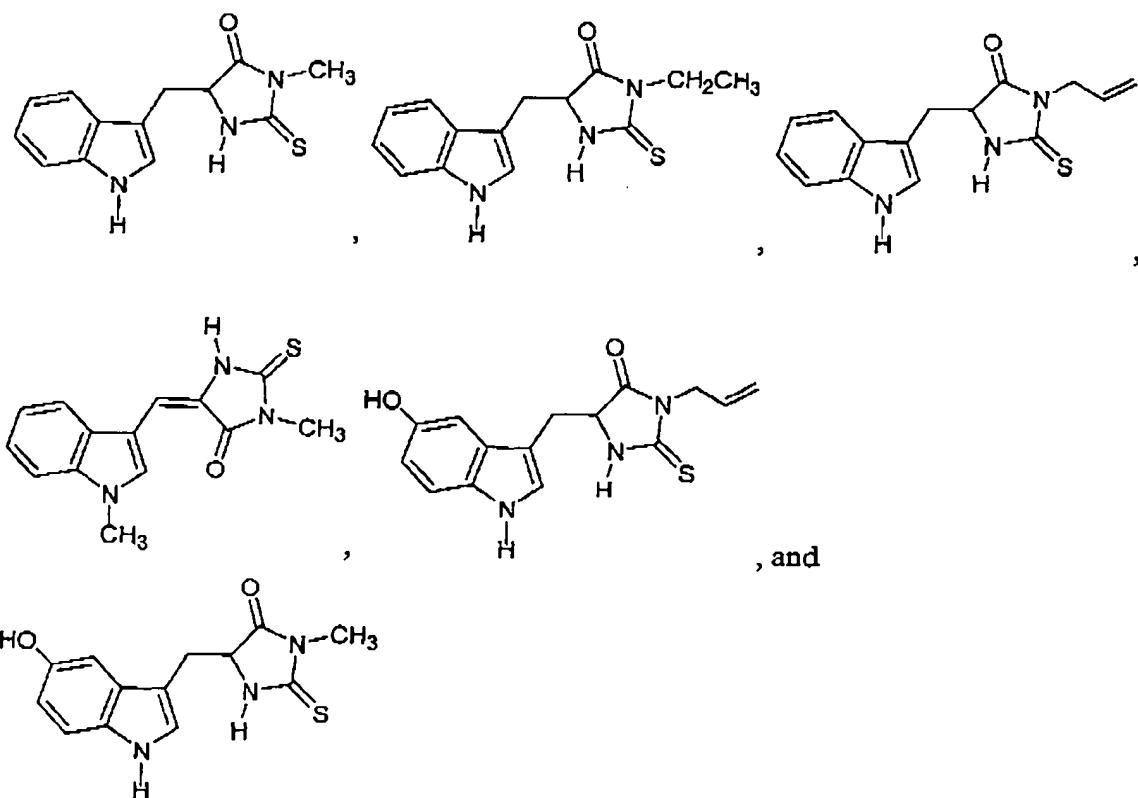
R_2 is selected from the group consisting of hydrogen, alkyl, and acyl;

R_3 is selected from the group consisting of alkyl, acyl, halogen, hydrogen, and hydroxyl;

R_4 is selected from the group consisting of methyl, hydroxyl, carboxyl, and linear and branching alkyl groups; and

each of the bonds (a), (b), and (c) independently is either a double or single bond, provided, however, that bond (a) and bond (b) are not both double bonds.

25. (Previously amended) The method of claim 24, wherein said compound is selected from the group consisting of:



Claims 26-31. (Withdrawn).

Claims 32-34. (Cancelled)

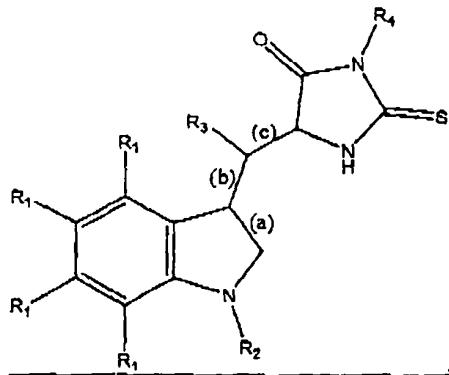
35. (Previously amended) The method of claim 24, wherein said subject is a mammal.

36. (Original) The method of claim 35, wherein said subject is a human.

37. (Original) The method of claim 35, wherein said subject is a rodent.

Claims 38-40: (Withdrawn)

41. (Currently amended) The method of claim 24, wherein said condition is A method for treating a subject with a disease or condition selected from the group consisting of: a neurodegenerative disease, a liver disease, a pancreatic disease, an ischemic brain injury, an ischemic heart injury, an ischemic injury to non-cardiac and non-neural tissue, a head trauma, a necrotic ulceration, septic shock, coronary heart disease, a gastrointestinal disease, tuberculosis, a viral infection, or and conditions associated with HIV infection or AIDS, said method comprising treating a cell with a chemical compound of the formula:



wherein

each R₁ is independently selected from the group consisting of hydrogen, methyl, carboxy, hydroxyl, methoxyl, amino, and nitro;

R₂ is selected from the group consisting of hydrogen, alkyl, and acyl;

R₃ is selected from the group consisting of alkyl, acyl, halogen, hydrogen, and hydroxyl;

R₄ is selected from the group consisting of methyl, hydroxyl, carboxyl, and linear and branching alkyl groups; and

each of the bonds (a), (b), and (c) independently is either a double or single bond, provided, however, that bond (a) and bond (b) are not both double bonds.

42. (New) A method for decreasing necrosis in a subject with a disease or condition selected from the group consisting of: a liver disease, a pancreatic disease, an ischemic brain injury, an ischemic heart injury, an ischemic injury to non-cardiac and non-neural tissue, a head trauma, a necrotic ulceration, septic shock, coronary heart disease, a gastrointestinal disease, tuberculosis, a viral infection, and conditions associated with HIV infection or AIDS, wherein decreasing necrosis is of benefit, said method comprising administering to said subject a chemical compound having the formula: